

APPARATUS AND METHOD FOR COMMUNICATING A MULTIWORD DIGITAL MESSAGE WITH AN ISOCHRONOUS-SIGNAL PROCESSOR

ABSTRACT OF THE DISCLOSURE

5

10

15

An apparatus and method for communicating multi-word digital messages with an isochronous-signal processor. A multi-word protocol enables the transfer of large blocks of data by breaking up the data into smaller blocks that are transferred without interrupting the isochronous data flow. The multi-word protocol includes a register for protocol control and status, and another register for read/write data. The protocol may be configured such that a multi-word write and a multi-word read may be in progress at the same time. The protocol is independent of the content of the multi-word message. In addition, for a multi-word read, the data is not required to be available immediately upon receipt of a request, and for a multi-word write, processing of the data is not required to be performed immediately.